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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,328	12/07/2001	Can C. Aysan	7000-497	6785
27820 7590 06/13/2007 WITHROW & TERRANOVA, P.L.L.C. 100 REGENCY FOREST DRIVE SUITE 160 CARY, NC 27518			EXAMINER MILLS, DONALD L	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 06/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/005,328		AYSAN ET AL.	
	Examiner		Art Unit	
	Donald L. Mills		2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Beser et al. (US 6,496,867 B1), hereinafter referred to as Beser.

Regarding claims 1, 8, and 9, Beser discloses a system and method to negotiate private network addresses for initiating tunneling associations through private and public networks, which comprises:

Examining a header of said packet to determine a private destination address;
Determining a private address of a private remote sub-endpoint of a tunnel, said private sub-endpoint being associated with said private destination address; Determining a public address of a public remote sub-endpoint of said tunnel; Encapsulating said packet, resulting in an encapsulated packet, to indicate a public address of a public local sub-endpoint of said tunnel as a source address and said public address of said public remote sub-endpoint of said tunnel as a destination address; and Forwarding said encapsulated packet to a node in a carrier network
(Referring to Figure 1, the transmission of a packet from the originating network device 24 to the terminating network device 26, without revealing the identity of either end of the public network

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12, requires that the packet is received on the first network device 14 (local sub-endpoint). The first network device 14 (local sub-endpoint) recognizes that the packet has come from the originating network device 24 and is destined for the terminating network device 26 by determining that the packet includes a private network address for the terminating network device 26. The first network device 14 (local sub-endpoint) examines the entry in its network address table that contains the private network address for the terminating network device 26 and determines that this private network address is associated with the public network address for the second network device 16 (remote sub-endpoint). In this manner, the first network device 14 (local sub-endpoint) knows where to route the packet on the public network 12 by translating the private network address for the terminating network device 26 to the public network address for the second network device 16 (remote sub-endpoint). See column 22, lines 6-22.)

Regarding claim 2, Beser discloses *wherein said tunnel is a point to a multipoint tunnel* (Referring to Figure 1, originating network device 24 communicates via a tunnel to terminating network device 26 via a first network device 14, public network 12, and second network device 16 (multipoint tunnel).)

Regarding claim 3, Beser discloses *wherein said determining said private address of said private remote sub-endpoint of said tunnel comprises consulting a routing table to discover an address associated with said private destination address of said packet* (Referring to Figure 1, The first network device 14 (local sub-endpoint) examines the entry in its network address table that contains the private network address for the terminating network device 26 and determines that this private network address is associated with the public network address for the second network device 16 (remote sub-endpoint). In this manner, the first network device 14 (local sub-

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endpoint) knows where to route the packet on the public network 12 by translating the private network address for the terminating network device 26 to the public network address for the second network device 16 (remote sub-endpoint). See column 22, lines 8-22.)

Regarding claim 4, Beser discloses *wherein said determining said public address of said public remote sub-endpoint of said tunnel comprises consulting a static resolution protocol table to discover an address associated with said private address of said private remote sub-endpoint of said tunnel* (Referring to Figure 1 and Table 4a, the network address tables allow for the translation from the private network address to forwarding network addresses. The forwarding network addresses are typically local area network addresses used for the routing of packets from the network devices to the ends of the tunneling association in which the Public IP address and Private IP addresses are obtained in relationship to the MAC address. See column 22, lines 23-28; column 23, lines 50-54; and column 24, lines 1-5.)

Regarding claim 5, Beser discloses *determining a private address of a first local sub-endpoint of said tunnel* (Referring to Figure 1 and Table 4a, the network address tables allow for the translation from the private network address to forwarding network addresses. The forwarding network addresses are typically local area network addresses used for the routing of packets from the network devices to the ends of the tunneling association in which the Public IP address and Private IP addresses are obtained in relationship to the MAC address. See column 22, lines 23-28; column 23, lines 50-54; and column 24, lines 1-5.)

Regarding claim 6, Beser discloses *consulting a forwarding table to discover an address associated with said private address of said private remote sub-endpoint of said tunnel* (Referring to Figure 1 and Table 4a, the network address tables allow for the translation from the

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private network address to forwarding network addresses. The forwarding network addresses are typically local area network addresses used for the routing of packets from the network devices to the ends of the tunneling association in which the Public IP address and Private IP addresses are obtained in relationship to the MAC address. See column 22, lines 23-28; column 23, lines 50-54; and column 24, lines 1-5.)

Response to Arguments

3. Applicant's arguments filed 30 March 2007 have been fully considered but they are not persuasive.

Rejection Under 35 USC

On page 4 of the remarks regarding claims 1, 8, and 9, the Applicant argues Beser does not disclose *encapsulating said packet, resulting in an encapsulated packet, to indicate a public address of a public local sub-endpoint of said tunnel as a source address and said public address of said public remote sub-endpoint of said tunnel as a destination address; and forwarding said encapsulated packet to a node in a carrier network*. The Examiner respectfully disagrees. Beser discloses the transmission of a packet from the originating network device 24 to the terminating network device 26, without revealing the identity of either end of the public network 12, requires that the packet is received on the first network device 14 (local sub-endpoint). The first network device 14 (local sub-endpoint) recognizes that the packet has come from the originating network device 24 and is destined for the terminating network device 26 by determining that the packet includes a private network address for the terminating network device 26. The first network device 14 (local sub-endpoint) examines the entry in its network address table that contains the

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private network address for the terminating network device **26** and determines that this private network address is associated with the public network address for the second network device **16** (remote sub-endpoint). In this manner, the first network device **14** (local sub-endpoint) knows where to route the packet on the public network **12** by translating the private network address for the terminating network device **26** to the public network address for the second network device **16** (remote sub-endpoint) (See column 22, lines 6-22.) The transmission process of Beser, outlined above, requires the encapsulation of a lower data link layer packet in an IP packet (encapsulation) in order to forward packets over a negotiated tunnel with private and public addresses as specified in column 9, lines 6-25. This does not represent a new grounds of rejections, but merely clarifies the Examiner's position in regards to the encapsulation process incorporated in Beser. Therefore, Beser discloses *encapsulating said packet, resulting in an encapsulated packet, to indicate a public address of a public local sub-endpoint of said tunnel as a source address and said public address of said public remote sub-endpoint of said tunnel as a destination address; and forwarding said encapsulated packet to a node in a carrier network.*

On page 5 of the remarks, regarding claim 2, the Applicant argues Beser does not disclose *wherein said tunnel is a point to a multipoint tunnel*. The Examiner respectfully disagrees. Claims are read in the broadest literal reasonable sense, and limitations from the specification are not read into the claims. Instead, the claims are read in light of the specification. Therefore, the Examiner interprets the term "multipoint tunnel" as referring to an end-to-end transmission across multiple network segments (points). Beser discloses the originating network device **24** communicates via a tunnel to terminating network device **26** via a

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first network device 14, public network 12, and second network device 16 (multipoint tunnel).

Therefore, Beser discloses *wherein said tunnel is a point to a multipoint tunnel*.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Mills whose telephone number is 571-272-3094. The examiner can normally be reached on 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Donald L Mills

June 7, 2007



CHI PHAM
SUPERVISORY PATENT EXAMINER

6/11/07